Case No. N0189US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

Kurt Brooks Uhlir, et al.

Serial No. 10/825,574

Filing Date: April 15, 2004

For: METHOD FOR COMPARING PERFORMANCES ON REMOTELY LOCATED COURSES

Examiner Kang Hu

Group Art Unit No. 3715

APPEAL BRIEF (37 CFR § 41.37)

Mail Stop: Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This Appeal Brief is submitted in accordance with 37 CFR § 41.37 and is filed in furtherance of the Notice of Appeal filed June 2, 2010.

I. Real Party in Interest

The real party in interest is NAVTEQ North America, LLC (formerly Navigation Technologies Corporation), a wholly-owned, indirect subsidiary of Nokia Corporation, a publicly-traded corporation that has its headquarters in Finland.

II. Related Appeals and Interferences

An appeal brief for this case was filed on December 9, 2008, and the Examiner presented the Applicants with a non-final office action in response to that appeal brief. There are no pending appeals, interferences, or judicial proceedings that may be related to, directly effect, or be directly affected by or have bearing on the Board's decision in this appeal.

III. Status of Claims

1. Claims 2-8, 11-14, 17-19, 23, and 36-38 are present and pending in the application. Claims 1, 9-10, 15-16, 20-22, and 24-35 have been previously canceled and claim 39 has been withdrawn.

2. Claims 2-8, 11-14, 17-19, 23, and 36-38 have been finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Muendel (WO 01/42809 A2) in view of Nimura, et al. (U.S. 6,098,015).

3. The rejections of claims 2-8, 11-14, 17-19, 23, and 36-38 are being appealed.

IV. Status of Amendments

Claims 36-37 were amended and claim 39 was withdrawn subsequent to the final rejection mailed March 2, 2010. The Examiner accepted and entered the amendments as noted in the Advisory Action mailed May 20, 2010.

V. Summary of Claimed Subject Matter

There are three (3) independent claims involved in this appeal: Claims 36-38. In addition, there are fifteen (15) dependent claims involved in this appeal: Claims 2-8, 11-14, 17-19, and 23.

Independent claim 36 relates to a method for facilitating a first performance by a participant in an event that includes movement along a first course located in a first geographic area (*e.g.*, Figure 1 (reference 8) and Figure 2 (reference 50); page 6, line 9 – page 9, line 14). The method includes using, by a computer processor, a geographic database that contains data that represents geographic features to compare geographic features of the first course to geographic features in a second geographic area different from the first geographic area, and the geographic database is stored on data storage hardware (*e.g.*, Figure 1 (references 24, 30, 54, 56) and Figure 2 (reference 58); page 3, lines 18-26; page 4, line 16 – page 5, line 17; page 6, line 26 – page 7, line 1). Another step of the method is identifying, by the computer processor and based on the comparison, data in the geographic database representing geographic features in the second geographic area that substantially match the geographic features of the first course (*e.g.*, Figure 2 (reference 58); page 7, lines 1-8). The method further includes determining, by the computer processor, a second course located in the second geographic area based on the identified data, the second course having a substantially equivalent surface, a substantially equivalent length, and substantially equivalent turns as the first course (*e.g.*, Figure 2 (reference 58); page 7, lines 2-17). Another step of the method is comparing the first performance to a second performance, wherein the second performance is along the second course (*e.g.*, Figure 1 (references 28, 54, 56) and Figure 2 (reference 64); page 7, lines 18-27; page 8, lines 5-8). The

method also includes providing an indication of the comparing of the first and second performances to the participant (*e.g.*, Figure 1 (references 16 and 18) and Figure 2 (reference 66); page 4, lines 4-7; page 8, lines 1-17).

Independent claim 37 relates to a system for facilitating performances in events (*e.g.*, Figure 1 (reference 8); page 3, line 17 – page 6, line 6). The system comprises a geographic database that contains data that represents geographic features in a first geographic area and a second geographic area different from the first geographic area, the data representing the geographic features include data representing connectivity of roads, address ranges along the roads, street names of the roads, and geographic coordinates of positions of the roads (*e.g.*, Figure 1 (references 30, 10, 12); page 3, lines 18-26; page 5, lines 1-17). The system also includes a competition comparison and equivalency program executed on a computer system that uses the geographic database to compare the geographic features of a first course located in the first geographic area to the geographic features in the second geographic area (*e.g.*, Figure 1 (references 28, 30, 54, 56) and Figure 2 (reference 58); page 4, line 23 – page 5, line 2; page 6, line 26 – page 7, line 1). The competition comparison and equivalency program also identifies, based on the comparison, data in the geographic database representing geographic features in the second geographic area that substantially match the geographic features of the first course (*e.g.*, Figure 2 (reference 58); page 7, lines 1-8). The competition comparison and equivalency program further determines a second course located in the second geographic area based on the identified data, and the second course having a substantially equivalent surface, a substantially equivalent length, and substantially equivalent turns as the first course (*e.g.*, Figure 2 (reference 58); page 7, lines 2-17). The competition comparison and equivalency program also indicates to a participant results of a comparison of a first performance by the participant in an event that

includes movement along the first course to a second performance along the second course, and the indication is presented to the participant while the participant is engaged in the first performance (*e.g.*, Figure 1 (references 16 and 18) and Figure 2 (references 64 and 66); page 4, lines 4-7; page 7, line 18 – page 8, line 17).

Independent claim 38 relates to a computer-readable medium having executable instructions stored thereon for performing a method for facilitating a first performance along a first course by a first participant (*e.g.*, Figure 1 (reference 8) and Figure 2 (reference 50); page 6, line 9 – page 9, line 14). The method includes using a geographic database that contains data that represents geographic features to compare geographic features of the first course located in a first geographic area with geographic features in a second geographic area different from the first geographic area (*e.g.*, Figure 1 (references 30, 54, 56) and Figure 2 (reference 58); page 3, lines 18-26; page 4, line 23 – page 5, line 17; page 6, line 26 – page 7, line 1). Another step of the method is identifying, based on the comparison, data in the geographic database representing geographic features in the second geographic area that substantially match at least one of the geographic features of the first course (*e.g.*, Figure 2 (reference 58); page 7, lines 1-8). The method further includes determining a second course located in the second geographic area based on the identified data (*e.g.*, Figure 2 (reference 58); page 7, lines 2-12). Another step of the method is providing information of the determined second course to a second participant (*e.g.*, Figure 2 (reference 60); page 7, lines 12-17). The method also includes comparing the first performance to a second performance, wherein the second performance is performed by the second participant along the second course (*e.g.*, Figure 1 (references 28, 54, 56) and Figure 2 (reference 64); page 7, lines 18-27; page 8, lines 5-8). Another step of the method is providing an indication of the comparing of the first and the second performances to the first participant

during the first performance (*e.g.*, Figure 1 (references 16 and 18) and Figure 2 (reference 66); page 4, lines 4-7; page 8, lines 1-17).

VI. Grounds of Rejection to be Reviewed on Appeal

1. At issue is whether Appellants' claims 2-8, 11-14, 17-19, 23, and 36-38 are obvious and unpatentable under 35 U.S.C. § 103(a) in view of Muendel (WO 01/42809 A2) and Nimura, et al. (U.S. 6,098,015).

VII. Argument

1. The Examiner Erred in Rejecting claims 2-8, 11-14, 17-19, 23, and 36-38 as being obvious in view of Muendel and Nimura, et al.

Reversal of the Examiner's rejection of claims 2-8, 11-14, 17-19, 23, and 36-38 is respectfully requested for the reasons set forth below.

"The key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious." MPEP § 2142. The Examiner has not provided adequate factual findings or rationale to support clear articulated reason(s) to reject the claims under the legal standard of obviousness.

(a) Rejection of Independent Claims 36 and Dependent Claims 2, 5-8, 11-14, and 17-18

Independent claim 36 recites, *inter alia*, "using, by a computer processor, a geographic database that contains data that represents geographic features to compare geographic features of the first course to geographic features in a second geographic area different from the first geographic area, the geographic database stored on data storage hardware," "identifying, by a

computer processor and based on the comparison, data in the geographic database representing geographic features in the second geographic area that substantially match the geographic features of the first course," and "determining, by a computer processor, a second course located in the second geographic area based on the identified data, the second course having a substantially equivalent surface, a substantially equivalent length, and substantially equivalent turns as the first course." The combination of Muendel and Nimura, et al. does not disclose at least these features and does not render the claim as obvious.

Muendel discloses a system for automatic monitoring of a real-time athletic performance of a user. (Muendel, Abstract). Athletes preparing for a race with a particular elevation profile might benefit from software that uses a digital elevation model database to engineer a local training route that has a similar elevation profile to that of the race. (Muendel, page 18, lines 23-25). Furthermore, in some cases, a virtual competition can be held whereby users at different locations and/or at different times can conduct a virtual competition. (Muendel, Abstract). For example, multiple competitors can wear training devices and complete respective courses at different locations. (Muendel, page 28, lines 1-10). Once all the competitors' results are sent to a server computer and stored in a data buffer, the server computer determines a "winner" taking any number of different approaches, such as considering age, weight, etc. as well as using other weighting factors. (Muendel, page 28, lines 14-19). A winner flag can be provided to indicate the winner. (Muendel, page 28, lines 19-20).

Nimura, et al. discloses a vehicle navigation system in which user preferred road data is determined and stored during travel to supplement fixed road data. (Nimura, et al., Abstract). Column 7, line 45 to column 8, line 28 of Nimura, et al. disclose a procedure to learn the user's

preference. Different road attributes are stored based on the user preferences, and this user preferred data can be used when a route is searched to determine a route reflecting user preferences. (Nimura, et al., column 6, lines 1-7).

On page 6 of the Final Office Action dated March 2, 2010, Examiner Hu asserted that Muendel teaches determining a second course located in a second geographic area based on identified data but does not explicitly teach identifying the second geographic area based on attributes of a substantially equivalent surface, a substantially equivalent length, substantially equivalent turns, etc. as the first course. On page 7 of the Final Office Action dated March 2, 2010, Examiner Hu asserted that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Nimura, et al. to Muendel to include the attributes specified in Nimura, et al. in determining a second equivalent course to the first to provide a best suitable course to the user as desired.

However, even if one of ordinary skill in the art would have combined the teachings of Nimura, et al. to the teachings of Muendel, there is still no disclosure or suggestion of using a geographic database to compare different areas and to determine a differently located second course having a substantially equivalent surface, a substantially equivalent length, and substantially equivalent turns as the first course. Muendel discloses that a digital elevation model database may be used to engineer a local training route that has a similar elevation profile to that of a race course. Yet, even if the database of Nimura, et al. is used to engineer the local training route with the similar elevation profile, only elevation data would be retrieved and used from the Nimura, et al. database based on the combined teachings of the references. The combination does not teach using a geographic database to determine a course having a substantially equivalent surface, a substantially equivalent length, and substantially equivalent

turns as another course located in a different area. Just because Nimura, et al. disclose various road attributes for vehicle routing does not mean the combination of the references discloses the features of using a geographic database to compare different areas and identify data to determine a course having a substantially equivalent surface, a substantially equivalent length, and substantially equivalent turns as another course located in a different area.

On page 2 of the Advisory Action dated May 20, 2010, Examiner Hu asserted that even though Muendel does not explicitly recite comparing two different geographic locales based on the number of different attributes provided in the limitations of claim 36, one of ordinary skill in the art at the time of the invention would have combined the teachings of Muendel and Nimura, et al. to provide the limitations as specifically claimed. Appellants' respectfully disagree. The combination of the cited references merely suggest using elevation information to engineer a local training route that has a similar elevation profile to that of a future race, for which someone is preparing. (Muendel, page 18, lines 23-25). Firstly, there is no suggestion or mention of looking at any other geographic attributes to try to design substantially equivalent courses (such as having substantially equivalent turns, surface, and length) at respective different locations. The teaching of Muendel is to provide a similar elevation profile for training purposes, not identifying a plurality of similar geographic features at different geographic areas to determine substantially equivalent courses, including substantially equivalent turns, surface, and length, at the separate locations. Secondly, the use of the elevation profile disclosed in Muendel is only mentioned when discussing a training route, not in the section (page 28, lines 1-20) that discusses competition. Accordingly, there is no actual teaching or suggestion of using geographic attributes to determine substantially equivalent courses at separate locations for competition.

Claim 36 would not have been obvious in view of Muendel and Nimura, et al. Accordingly, reversal of the rejection of claim 36 is respectfully requested.

Claims 2, 5-8, 11-14, and 17-18 depend, directly or indirectly, from claim 36. The arguments regarding claim 36 appropriately apply to the dependent claims as well. Accordingly, reversal of the rejections of claims 2, 5-8, 11-14, and 17-18 is respectfully requested.

(b) Rejection of Independent Claim 38 and Dependent Claims 3-4 and 19

Independent claim 38 recites, *inter alia*, "providing an indication of the comparing of the first and the second performances to the first participant during the first performance." The combination of Muendel and Nimura, et al. does not disclose at least this feature and does not render the claim as obvious.

Muendel discloses a system for automatic monitoring of a real-time athletic performance of a user and Nimura, et al. disclose a vehicle navigation system in which user preferred road data is determined and stored during travel to supplement fixed road data, as mentioned above, in more detail, in regards to independent claim 36.

On page 7 of the Final Office Action dated March 2, 2010, Examiner Hu asserted that Muendel further teaches providing an indication of the comparing of first and second performances to the participant by pointing to page 28, line 20 of the Muendel reference.

However, even if one of ordinary skill in the art would have combined the teachings of Nimura, et al. to the teachings of Muendel, there is still no disclosure or suggestion of providing an indication of the comparing of first and second performances to a first participant *during* the first performance.

Muendel discloses that after all of the competitors' results are sent to the server computer, the server computer then determines the winner. (Muendel, page 28, lines 14-20). Accordingly, the winner flag or indication disclosed by Muendel is provided *after* the competitors' performances, not during a performance. The combination does not disclose or suggest providing an indication of the comparing of first and second performances (which are by different participants and are in separate locations/courses) to a first participant while the first participant is engaged in the first performance.

On page 2 of the Advisory Action dated May 20, 2010, Examiner Hu asserted that Muendel does disclose providing the claimed indication to a participant while the participant is engaged in the performance by pointing to page 28, lines 14-20 and page 10, lines 1-25. However, lines 14-20 of Muendel state that a server computer determines a winner after all the competitors' results have been stored and that certain weighting factors may be used to determine the winner. There is no mention of providing an indication of the comparing of the first and the second performances to the first participant *during* the first performance. Furthermore, page 10, lines 1-25 of Muendel describe a network and a GPS personal trainer device, but there is no mention of providing an indication of the comparing of the first and second performances to the first participant *during* the first performance.

Claim 38 would not have been obvious in view of Muendel and Nimura, et al. Accordingly, reversal of the rejection of claim 38 is respectfully requested.

Claims 3-4 and 19 depend from claim 38. The arguments regarding claim 38 appropriately apply to the dependent claims as well. Accordingly, reversal of the rejections of claims 3-4 and 19 is respectfully requested.

(c) Rejection of Independent Claim 37 and Dependent Claim 23

Independent claim 37 recites, *inter alia*, "a geographic database that contains data that represents geographic features in a first geographic area and a second geographic area different from the first geographic area, the data representing the geographic features include data representing connectivity of roads, address ranges along the roads, street names of the roads, and geographic coordinates of positions of the roads" and "a competition comparison and equivalency program executed on a computer system that uses the geographic database to compare the geographic features of a first course located in the first geographic area to the geographic features in the second geographic area; identifies, based on the comparison, data in the geographic database representing geographic features in the second geographic area that substantially match the geographic features of the first course; determines a second course located in the second geographic area based on the identified data, the second course having a substantially equivalent surface, a substantially equivalent length, and substantially equivalent turns as the first course; and indicates to a participant results of a comparison of a first performance by the participant in an event that includes movement along the first course to a second performance along the second course, the indication being presented to the participant while the participant is engaged in the first performance." The combination of Muendel and Nimura, et al. does not disclose at least these features and does not render the claim as obvious.

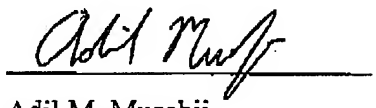
Claim 37 includes limitations that are similar to limitations of claims 36 and 38, and, so, the arguments made above regarding claims 36 and 38 appropriately apply to claim 37 as well. Therefore, claim 37 would not have been obvious in view of Muendel and Nimura, et al. Accordingly, reversal of the rejection of claim 37 is respectfully requested.

Claim 23 depends from claim 37. The arguments regarding claim 37 appropriately apply to the dependent claims as well. Accordingly, reversal of the rejections of claim 23 is respectfully requested.

Conclusion

Appellants respectfully submit that the rejections of claims 2-8, 11-14, 17-19, 23, and 36-38 raised by the Examiner were in error for at least the reasons set forth above. Accordingly, reversal of all grounds of rejection is respectfully requested.

Respectfully submitted,



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VIII. Claims Appendix

2. The method of Claim 36 wherein the event is one selected from a group consisting of: running, bicycling, a road rally, a triathlon, a soap box derby, a dog sled race, cross-country skiing, sledding, a roller blade race, race walking, rowing, a steeplechase street luge, adventure racing, snow boarding, rock climbing, and extreme runs.

3. The method of Claim 38 further comprising:

selecting the second course to be equivalent to the first course by applying a factor selected from a group consisting of: distance, elevation changes, temperature, humidity, wind, surface, turns, average time per distance, average volume oxygen expelled per unit distance, average heart-rate per unit distance, time to complete a particular segment, and calories expended.

4. The method of Claim 38 further comprising:

selecting the second course to be equivalent to the first course by applying a personal factor selected from a group consisting of: age, gender, and physical handicaps.

5. The method of Claim 36 further comprising:

determining positions of the first participant during the first performance.

6. The method of Claim 5 wherein the positions of the first participant are determined using a first positioning device.

7. The method of Claim 6 wherein the first positioning device is selected from a group consisting of: a Global Positioning System unit, a Differential Global Positioning System unit, cell phone positioning technology that uses triangulation, cell phone positioning technology that uses time-of-arrival, cell phone positioning technology that uses direction-of arrival, and beacons.

8. The method of Claim 5 wherein the positions of the first participant are transmitted as data wirelessly from a first communications device located with the first participant.

11. The method of Claim 36 further comprising:

determining positions of a second participant during the second performance.

12. The method of Claim 11 wherein the positions of the second participant are determined using a second positioning device.

13. The method of Claim 12 wherein the second positioning device is selected from a group consisting of: a Global Positioning System unit, a Differential Global Positioning System unit, cell phone positioning technology that uses triangulation, cell phone positioning technology that uses time-of-arrival, cell phone positioning technology that uses direction-of arrival, and beacons.

14. The method of Claim 11 wherein the positions of the second participant are transmitted as data wirelessly from a second communications device located with the second participant.

17. The method of Claim 36 wherein the second performance is by the first participant, but occurred at a time previous to a time of the first performance.

18. The method of Claim 36 wherein the indication is provided to the first participant during the event.

19. The method of Claim 38 further comprising:

providing the indication of the comparing of the first and the second performances to the second participant during the second performance, the first and the second performances starting at a same time.

23. The system of Claim 37 wherein the participant's performance is monitored by a positioning unit that determines positions of the participant in the first geographic area while the participant is moving along the first course in the first geographic area.

36. A method for facilitating a first performance by a participant in an event that includes movement along a first course located in a first geographic area, the method comprising:

using, by a computer processor, a geographic database that contains data that represents geographic features to compare geographic features of the first course to geographic features in a second geographic area different from the first geographic area, the geographic database stored on data storage hardware;

identifying, by the computer processor and based on the comparison, data in the geographic database representing geographic features in the second geographic area that substantially match the geographic features of the first course;

determining, by the computer processor, a second course located in the second geographic area based on the identified data, the second course having a substantially equivalent surface, a substantially equivalent length, and substantially equivalent turns as the first course;

comparing the first performance to a second performance, wherein the second performance is along the second course; and

providing an indication of the comparing of the first and second performances to the participant.

37. A system for facilitating performances in events comprising:

a geographic database that contains data that represents geographic features in a first geographic area and a second geographic area different from the first geographic area, the data representing the geographic features include data representing connectivity of roads, address ranges along the roads, street names of the roads, and geographic coordinates of positions of the roads; and

a competition comparison and equivalency program executed on a computer system that:

uses the geographic database to compare the geographic features of a first course located in the first geographic area to the geographic features in the second geographic area,

identifies, based on the comparison, data in the geographic database representing geographic features in the second geographic area that substantially match the geographic features of the first course,

determines a second course located in the second geographic area based on the identified data, the second course having a substantially equivalent surface, a substantially equivalent length, and substantially equivalent turns as the first course, and

indicates to a participant results of a comparison of a first performance by the participant in an event that includes movement along the first course to a second performance along the second course, the indication being presented to the participant while the participant is engaged in the first performance.

38. A computer-readable medium having executable instructions stored thereon for performing a method for facilitating a first performance along a first course by a first participant, the method comprising:

using a geographic database that contains data that represents geographic features to compare geographic features of the first course located in a first geographic area with geographic features in a second geographic area different from the first geographic area;

identifying, based on the comparison, data in the geographic database representing geographic features in the second geographic area that substantially match at least one of the geographic features of the first course;

determining a second course located in the second geographic area based on the identified data;

providing information of the determined second course to a second participant;

comparing the first performance to a second performance, wherein the second performance is performed by the second participant along the second course; and

providing an indication of the comparing of the first and the second performances to the first participant during the first performance.

IX. Evidence Appendix

None

X. Related Proceedings Appendix

None